

IN THE CLAIMS

Please amend claims 1, 2, 5, 7, 8, 10, 11, and 12 as follows:

AI

1 1. (Amended) In a computer system comprising a plurality of sites, a method  
2 of replicating data that is stored at a first site of said plurality of sites, said data  
3 belonging to [in] one or more schemas [sets of formatted data at a first site of said  
4 plurality of sites], said method comprising the computer-implemented steps of:  
5 creating a mapping between subsets of data within said one or more schemas  
6 [sets of formatted data] and one or more object groups;  
7 specifying one or more replication sites for each of said one or more object  
8 groups;  
9 for each of said one or more object groups, creating at the one or more  
10 replication sites for said object group a replica of each subset of data  
11 that is mapped to said object group;  
12 detecting at said first site a data modification to a particular subset of data  
13 within said one or more schemas; and  
14 if said particular subset of data has been mapped to an object group of said  
15 one or more object groups, then propagating said data modification to  
16 the one or more replication sites of said object group.

1 2. (Amended) The method of Claim 1 wherein:  
2 said one or more schemas [sets of formatted data] includes a first schema [set  
3 of formatted data] and a second schema [set of formatted data]; and  
4 the step of creating a mapping includes the steps of

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5 mapping said first subset of data to a first object group, said first  
6 subset of data residing in said first schema [set of formatted  
7 data], and  
8 mapping a second subset of data to said first object group, said  
9 second subset of data residing in said second schema [set of  
10 formatted data].

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1 3. (Not Amended) The method of Claim 1 wherein said step of creating a  
2 mapping includes:

3 maintaining an object groups table, and  
4 maintaining a replicated objects table.

1 4. (Not Amended) The method of claim 3 further comprising the steps of:

2 receiving a first input that identifies an object group;

3 adding an object group record to said object groups table, said object group  
4 record identifying said object group;

5 receiving a second input that identifies a subset of data; and

6 adding a replicated object record to said replicated objects table, said  
7 replicated object record identifying said subset of data.

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A2

1 5. (Amended) The method of claim 1 further comprising the step of  
2 generating [a trigger] one or more replication support objects for at least one of said

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3 one or more subsets of data [, said trigger responsive to data modifications to the  
4 subset of data].

1 6. (Not Amended) The method of claim 1 further comprising the steps of:  
2 designating a first replication site as a master site to receive propagated data  
3 modifications corresponding to replicas stored at said first replication  
4 site immediately upon detection of said data modifications or at  
5 predetermined time-based intervals; and  
6 designating a second replication site as a snapshot site to receive propagated  
7 data modifications corresponding to replicas stored at said second  
8 replication site, said propagated data modifications sent from said  
9 master site at predetermined time-based intervals or on demand.

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1 7. (Amended) In a computer system comprising a plurality of sites, a method  
2 for specifying how data is replicated in the computer system, said method  
3 comprising the computer-implemented steps of:  
4 mapping a subset of data that resides in a particular schema [set of formatted  
5 data] to an object group;  
6 mapping said object group to one or more sites of said plurality of sites; and  
7 creating replicas of said subset of data at each of said one or more sites.

A3

1 8. (Amended) The method of Claim 7 further comprising the step of[:]  
2 mapping at least two subsets of data to said object group, the first of said at least two  
3 subsets of data corresponding to a first schema [group of formatted data] and the  
4 second of said at least two subsets of data corresponding to a second schema [group  
5 of formatted data].

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1 9. (Not Amended) The method of Claim 7 further comprising the step of  
2 maintaining a set of destinations to which said subset of data is replicated.

1 10. (Amended) The method of Claim 7 wherein said step of mapping a  
2 subset of data that resides in a schema [set of formatted data] to an object group  
3 includes:

4 maintaining an object groups table, and  
5 maintaining a replicated objects table.

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A4

1 11. (Amended) A machine-readable medium that has stored thereon one or  
2 more sequences of instructions, the one or more sequences of instructions including  
3 instructions which, when executed by a processor, cause said processor to perform  
4 the steps of:  
5 creating a mapping between subsets of data within said one or more schemas  
6 [sets of formatted data] and one or more object groups;

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7 specifying one or more replication sites for each of said one or more object  
8 groups;  
9 for each of said one or more object groups, creating at the one or more  
10 replication sites for said object group a replica of each subset of data  
11 that is mapped to said object group;  
12 detecting at said first site a data modification to a particular subset of data  
13 within said one or more schemas; and  
14 if said particular subset of data has been mapped to an object group of said  
15 one or more object groups, then propagating said data modification to  
16 the one or more replication sites of said object group.

9. 8  
1 ~~12.~~ (Amended) The machine-readable medium of claim ~~11~~ wherein:  
2 said one or more schemas [sets of formatted data] includes a first schema [set  
3 of formatted data] and a second schema [set of formatted data]; and  
4 the step of creating a mapping includes:  
5 the steps of mapping said first subset of data to a first object group, said first  
6 subset of data residing in said first schema [set of formatted data],  
7 and  
8 mapping a second subset of data to said first object group, said second subset  
9 of data residing in said second schema [set of formatted data].

1 13. (Not Amended) The machine-readable medium of claim 12 wherein  
2 said step of creating a mapping includes:  
3 maintaining an object groups table, and

4 maintaining a replicated objects table

1 14. (Not Amended) The machine-readable medium of claim 11 further

2 comprising the steps of:

3 designating a first replication site as a master site to receive propagated data

4 modifications corresponding to replicas stored at said first replication

5 site immediately upon detection of said data modifications; and

6 designating a second replication site as a snapshot site to receive propagated

7 data modifications corresponding to replicas stored at said second

8 replication site, said propagated data modifications sent from said

9 master site at predetermined time-based interval.

Please add new claims 15-25 as follows:

1 ~~6.~~ 15. (New) The method of Claim 5, wherein the step of generating one or

2 more replication support objects includes generating a trigger.

1 ~~11.~~ 16. (New) The machine-readable medium of Claim ~~12~~ <sup>10.</sup>, further including

2 sequences of instructions for:

3 receiving a first input that identifies an object group;

4 adding an object group record to said object groups table, said object group  
5 record identifying said object group;  
6 receiving a second input that identifies a subset of data; and  
7 adding a replicated object record to said replicated objects table, said  
8 replicated object record identifying said subset of data.

1 ~~13.~~ 17. (New) The machine-readable medium of Claim ~~11~~ 8, further including  
2 sequences of instructions for generating one or more replication support objects for  
3 at least one of said one or more subsets of data.

1 ~~14.~~ 18. (New) The machine-readable medium of Claim ~~17~~ 13, wherein the step of  
2 generating one or more replication support objects includes generating a trigger.

1 ~~15.~~ 19. (New) A machine-readable medium that has stored thereon one or more  
2 sequences of instructions, the one or more sequences of instructions including  
3 instructions which, when executed by a processor, cause said processor to perform  
4 the steps of:

5 mapping a subset of data that resides in a particular schema to an object  
6 group;  
7 mapping said object group to one or more sites of said plurality of sites; and  
8 creating replicas of said subset of data at each of said one or more sites.

16. 20. (New) The machine-readable medium of Claim 15 further including  
instructions for performing the step of mapping at least two subsets of data to said  
object group, the first of said at least two subsets of data corresponding to a first  
schema and the second of said at least two subsets of data corresponding to a second  
schema.

17. 21. (New) In a computer system comprising a plurality of sites, a method of  
configuring an environment for providing data replication, said method comprising  
the computer-implemented steps of:

creating one or more replicated object groups at a first site;  
maintaining a set of replicated object groups, said set of replicated object  
groups including said one or more replicated object groups;  
maintaining a set of replicated objects for each of said one or more replicated  
object groups;  
maintaining one or more groups of formatted data;  
adding one or more replicated objects to said one or more replicated object  
groups to register said one or more replicated objects for replication,  
said one or more replicated objects corresponding to data from one or  
more schemas; and  
creating replicas of said one or more replicated objects at a second site.

18. 22. (New) The method of Claim 21 further comprising the step of:



2 adding at least two replicated objects to one of said one or more replicated  
3 object groups, the first of said at least two replicated objects  
4 corresponding to a first schema and the second of said at least two  
5 replicated objects corresponding to a second schema.

1 ~~19.~~ 23. (New) The method of Claim ~~21~~ further comprising the step of:  
2 maintaining a set of generated objects for each of said one or more replicated  
3 objects, said generated objects for supporting data replication.

1 ~~20.~~ 24. (New) The method of Claim ~~21~~ further comprising the step of:  
2 maintaining a set of destinations to which each of said one or more replicated  
3 objects is replicated.

1 ~~21.~~ 25. (New) The method of Claim ~~21~~ wherein:  
2 said step of maintaining a set of replicated object groups includes  
3 maintaining an object groups table in a data dictionary; and  
4 said step of maintaining a set of replicated objects for each of said one or  
5 more replicated object groups includes maintaining a replicated  
6 objects table in said data dictionary.

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